<u>**Amendments to the Specification**</u>:

Please replace the paragraph beginning on page 9, line 10, with the following amended paragraph:

The psychoacoustic unit 42 provides information on a psychoacoustic model such as attack detection information or the like to the transforming unit 41, packs the audio signal transformed by the transforming unit ~~21~~ 41 into sub-band audio signals, calculates a masking threshold for each of the sub-bands using a masking effect resulting from the interaction among the sub-band signals, and provides the masking threshold to the quantizing unit ~~23~~ 43. The masking threshold indicates the maximum power of an audio signal that ~~human~~ humans cannot perceive due to the interaction between audio signals. In the present embodiment, the psychoacoustic unit 42 calculates a masking threshold and the like for stereo components using Binaural Masking Level Depression (BMLD).